

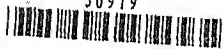
BARAUT TOWN

79



GIDS Library

36919



1307.72 JAF

anpur Highway passing Baraut Town, Heavy Vehicles create Congestion and Environment Pollution

PROVIDING URBAN AMENITIES IN RURAL AREAS OF BARAUT TOWN'S CLUSTER VILLAGES

Sponsored by:

D.R.D.A., BAGHPAT
Government of Uttar Pradesh

S.S.A. JAFRI

GIRI INSTITUTE OF DEVELOPMENT STUDIES

(AN INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH (ICSSR) GOVERNMENT OF INDIA, SPONSORED RESEARCH INSTITUTE)

SECTOR 'O', ALIGANJ HOUSING SCHEME

LUCKNOW 226 024

Phone : (0522) 2373640, 2321860, 2325021; Telefax: (0522) 2373640

E-Mail : gids@sancharnet.in; Website: www.egiri.org.in

2004



I
307.72
JAF
U.P. - Rural dev
U.P. PURA
U.P. village schools
I
307.72
JAF

PREFACE

Uttar Pradesh is the most populous state of India, which ranks seventh if compared with the countries of the world. In Uttar Pradesh out of total 166,052,859 population (Census, 2001) roughly about one-fifth is urban population living in about 684 towns/cities, which consist about 6734 identified slums. Most of these slums are in big cities, inhabited by mainly migrants from rural areas who migrate in search of employment. In rural areas agriculture has failed to accommodate working age population and also the amenities and services are quite poor, which force the people to migrate to big cities, which are already crowded. Small and medium towns are also not much different than rural areas in terms of employment avenues, proper amenities and services and thus they are not capable to attract the rural migrants. The result is that the small and medium towns are growing very slow, or they are stagnant. The Government of India's policy is to provide the amenities and services to develop 5000 village clusters around the small and medium towns of the country so that the rural - urban gap may be bridged and these towns may expand. In the first phase in each district one such cluster of 10-15 villages has to be developed. For district Baghpat the clusters of villages are chosen around Baraut town, which is centrally located. Baraut is located on Delhi - Saharanpur and Meerut - Karnal Highways crossing. The most fertile land around Baraut in Ganga - Yamuna Doab is famous for hard working Jats, sugarcane and bumper wheat crop. Most of the farmers are comparatively rich which reflects on their physique and house construction, but the villages are poor in urban infrastructure and amenities. If the proposed uninterrupted power supply, potable water, efficient transport and communication, proper educational facilities, health services and proper marketing are provided in rural areas, then definitely the push factor towards Delhi would be weakened.

This study of Providing Urban Amenities in Rural Areas of Baraut Town's Cluster Villages has been undertaken by the Giri Institute of Development Studies, Lucknow, which is sponsored by DRDA, Baghpat. We are extremely grateful to Shri M.K. Gupta, Chief Development Officer, Baghpat who was kind to recognize the Giri Institute of Development Studies, Lucknow to take up this delicate research task. Through out the field survey Shri J.P. Rastogi, Project Director, Baghpat was behind the scene and helped us at every step as a guiding force, we are grateful to him. Shri R.N. Singh and Shri Daya Ram, BDOs, Baraut and Baghpat Blocks respectively were always readily available to our survey team and who were quite helpful and they deserve our thanks. Shri Bhupendra Singh, ADO, Baraut was specially kind and helpful in our study, we are highly thankful to him.

Prof. A.K. Singh, our respected senior colleague and Director of the Giri Institute of Development Studies, Lucknow, who entrusted me to undertake this study, was always the source of inspiration by which it could be possible to bring this report into a shape. Dr. (Ms.) Abhilasha Srivastava (Research Assistant) of our project managed the secondary data and handled the primary field data in preparing the tables on computer, deserve heartfelt thanks. Our field staff Shri Brijesh Tewari (Research Assistant) and Shri Mohammad Zubair Akhtar (Research Assistant) took the task of collecting the data from the field, we acknowledge and thank for their most tiring efforts. Also. Ms. Shweta Mishra, my Ph.D. student and Ms. S.M.S. Jafri, my daughter who volunteered in preparing the maps, I am thankful to them. Special thanks to Shri Manoharan K., Office Assistant, who word processed the script on computer with all responsibility. Last but not the least, I am grateful to my faculty colleagues, staff of Library, Computer and Administration who always inspired and gave encouragement to complete the task.

We are sure that our efforts would bring a great change in transforming the lives of villagers living in cluster of villages around Baraut and rural - urban divide would be narrowed.

Dr. S.S.A. JAFRI

*Giri Institute of Development Studies
Sector O, Aliganj Housing scheme
Lucknow 226 024*

August 12, 2004

CONTENTS

	<u>Page No.</u>
Preface	<i>i-iii</i>
List of Tables	<i>v</i>
List of Figures	<i>vi</i>
1. Introduction	4-8
2. Available Amenities at a Glance	8-9
3. Methodology	10
4. Population Dynamics	10-18
5. Dependable Power Supply	18-20
6. Potable Water Supply	20-22
7. Road Transport	23-25
8. Telephone, Mobile, PCO, Internet and IT Services	26-28
9. Education	29-33
10. Health and Sanitation	33-35
11. Market and Allied Facilities	35-37

LIST OF TABLES

<u>Table No.</u>	<u>Titles</u>	<u>Page No.</u>
Table 1	Amenities which are available in Proposed PURA Villages	9
Table 2	Population Structure, 2004	11
Table 3	Electricity Infrastructure: Existing and Proposed	19
Table 4	Potable Water: Existing and Proposed	21
Table 5	Road Transport: Existing and Proposed	24
Table 6	Telephone, Mobile, PCO, Internet and IT Services: Existing and Proposed	27
Table 7	Education: Existing and Proposed	30
Table 8	Health and Sanitation: Existing and Proposed	34
Table 9	Market and Allied Amenities: Existing and Proposed	36
Table 10	Total Expected Expenditure under PURA-Baraut	37

LIST OF FIGURES

<u>Figure No.</u>	<u>Titles</u>	<u>Page No.</u>
Fig.1	India - Location of Baraut Town	1
Fig.2	Cluster of Villages of Baraut for PURA	2
Fig.3	Wall Map of Baraut Block	3
Fig.4	Pradhan of Malakpur Village	5
Fig.5	An Akhara	7
Fig.6	Cluster of Villages of Baraut for PURA : Sex Ratio	12
Fig.7	Cluster of Villages of Baraut for PURA : Density of Population	14
Fig.8	Cluster of Villages of Baraut for PURA : Proportion of SC Population	15
Fig.9	Cluster of Villages of Baraut for PURA : Proportion of OBC Population	16
Fig.10	A Scene of Loyan Village	22
Fig.11	Cluster of Villages of Baraut for PURA : Existing and Proposed Road Links	25
Fig.12	Cluster of Villages of Baraut for PURA : Literacy	28
Fig.13	Middle School of Malakpur Village	31

FIG.1

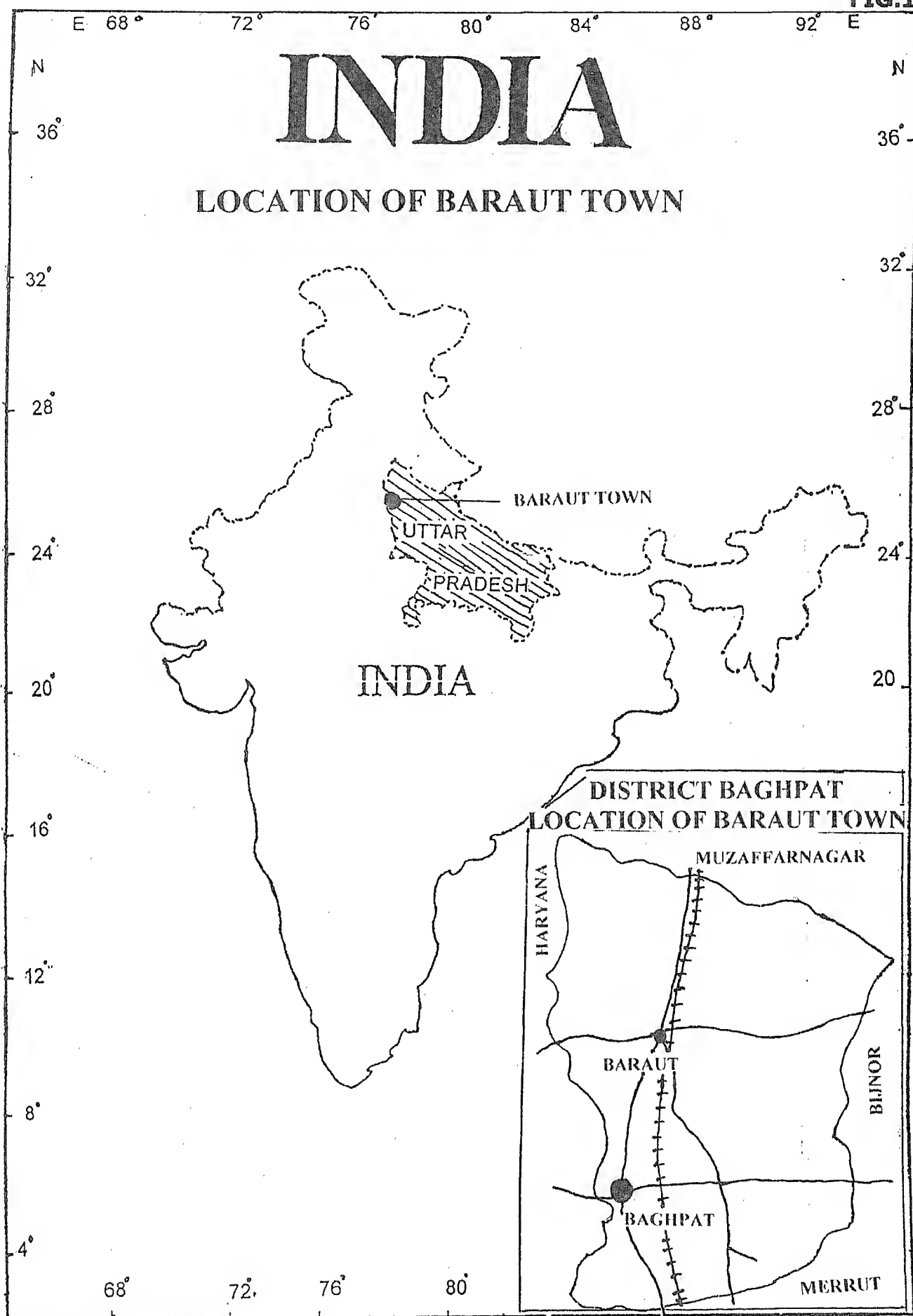


FIG.2

DISTRICT BAGHPAT

BAGHPAT AND BARAUT BLOCKS

CLUSTER OF VILLAGES OF BARAUT FOR PURA

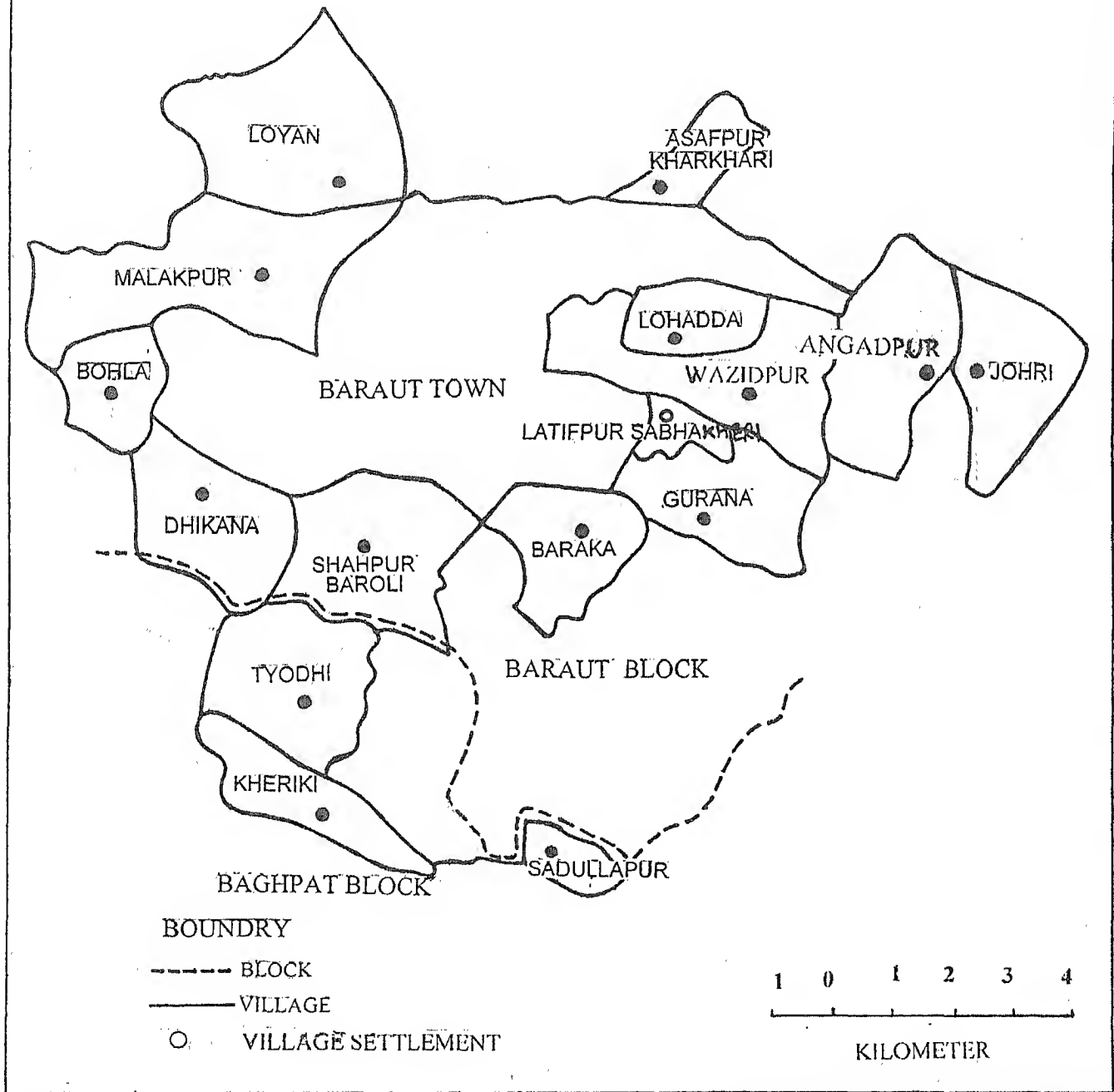
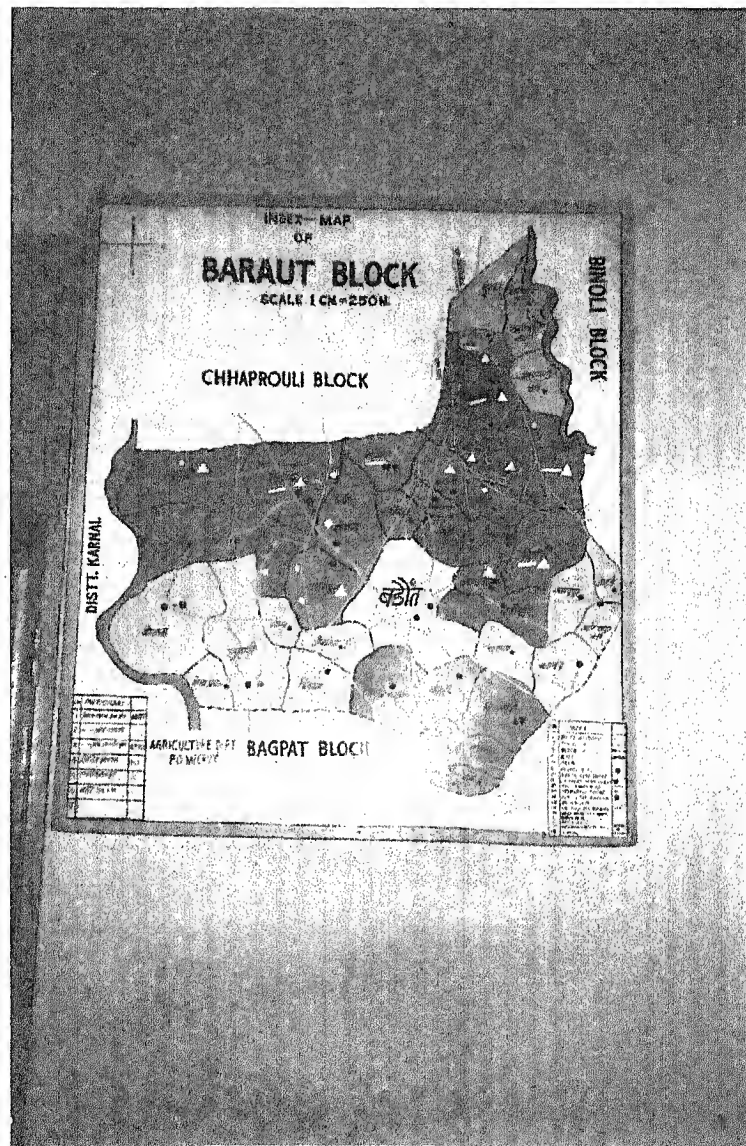


FIG.3: WALL MAP OF BARAUT BLOCK



As Hanging in BDO's Office

1. INTRODUCTION

Urbanization is a universal process where rural areas are transformed into towns. Since agriculture is not so capable to absorb all the working age population, therefore, industrialization is the only alternative to provide the livelihood. In real sense, industries can only survive in towns and cities. In India large metropolitan cities are growing very fast and creating an overall chaos but the small townships are growing quite slow or they are just stagnant. This lopsided growth creates regional imbalance and huge rural to urban migration takes place. For example from Eastern U.P. large number of male population has migrated to cities and towns of Western U.P. and Delhi, which resulted into a very high sex ratio in places of out-migration. Small and medium towns do not attract industries due to lack of urban amenities, therefore, they are incapable to provide jobs. Also small and medium towns are unplanned and congested, therefore, it is essential that they should expand but in planned manner. Besides providing amenities in main towns if the village clusters of fringe areas are also provided the urban amenities towns would expand, it would attract industries and overall urban activities would grow. Thus, the unemployment and out-migration of the immediate neighbourhood can easily be tackled. Since PURA scheme is to be implemented in each district, definitely it would show a positive impact on overall urban scenario.

Fig.4: PRADHAN OF MALAKPUR VILLAGE



Chaudhary (Pradhan) is sharing Huqqa with his courtiers

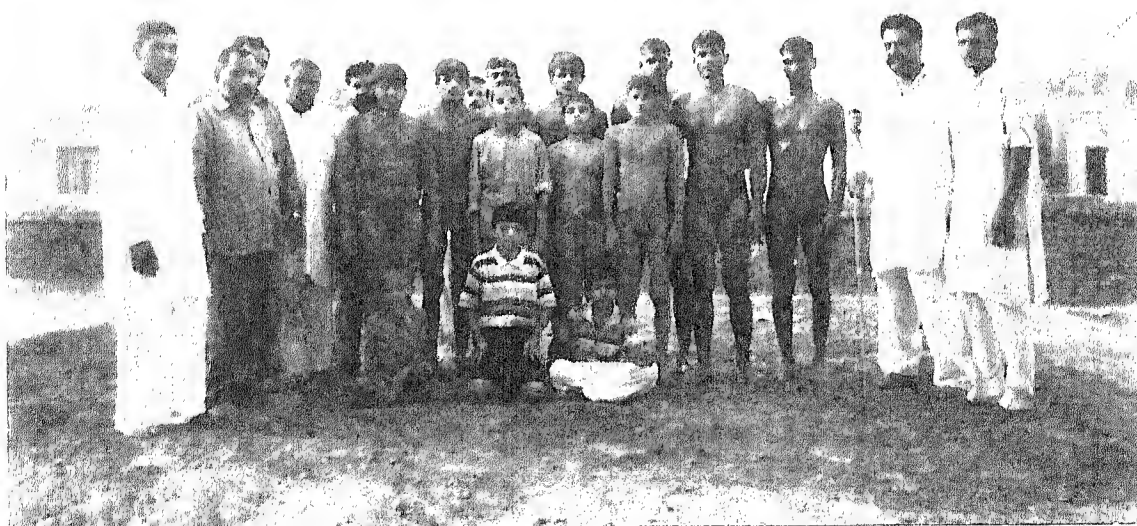
The Central scheme of Provision of Urban Amenities in Rural Areas (PURA) was announced by the Prime Minister in August 2003. The purpose of this scheme is to provide urban amenities in cluster of 10 to 15 villages around the fringe of a town of the size of 20,000 to 100,000 population. It is expected that it would help in reducing the great rural - urban divide and lead to a balanced socio-economic development in the district. The cluster of villages would be provided the following important amenities during a period of 2 - 3 years like:

1. Assured power supply
2. Potable water supply
3. Road transportation facilities
4. Dependable telephone, Internet and IT services
5. Systematic upgradation of existing schools/colleges
6. Upgradation of existing health services
7. Market facilities for farmers to get better prices of their produce.

The government has decided to implement the PURA strategy in 5000 rural clusters across the country in the next five years. Baraut has been selected as one such cluster for implementing the PURA scheme.

Baraut town lies almost in the centre of Baghpat district. District Baghpat was the part of district Meerut till September 1997. District Baghpat is located in Western Uttar Pradesh and its Western boundary is formed by river Yamuna, which separates it from Haryana. Baraut town is

Fig.5 : AN AKHARA



Wrestlers of National and International Repute

managed by Municipal Board. The total population of Baraut is 85,822 (2001), which grew to 174.51 per cent during 1971-2001. The PURA cluster consists of the following villages:

1. Malakpur
2. Shahpur Badauli
3. Barka
4. Dhikana
5. Lohadda
6. Lohan
7. Bohala
8. Johari
9. Gorana
10. Latifpur Sabakheri
11. Asafpur Kharkhari
12. Kherki
13. Wazidpur
14. Teodi
15. Sadullapur
16. Angadpur

2. AVAILABLE AMENITIES AT A GLANCE

The following amenities are available in proposed PURA villages:

Table 1: Amenities, which are available in Proposed PURA Villages

Name of PURA Villages	All weather Road	Public Transport	Electricity	Telephone	Primary School (I-V Classes)	Middle School (Upto VIII Classes)	Health Centres	Veterinary Hospital	Post Offices	Banks	Police Station	Tubewell	Weekly Market/Bazaar	Retail Shop		
														Implements	Fertilizer and Seeds	General
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Malakpur	✓	✓	✓	✓	✓	✓	X	X	✓	X	X	X	X	X	✓	✓
Shahpur Badauli	✓	✓	✓	✓	✓	✓	X	✓	✓	X	X	X	X	✓	✓	✓
Baraka	✓	X	✓	✓	✓	✓	X	X	✓	X	X	X	X	X	✓	✓
Dhikana	✓	X	✓	✓	✓	✓	X	X	✓	X	X	X	X	X	X	✓
Lohadda	✓	X	✓	✓	✓	✓	✓	X	X	X	X	X	X	✓	✓	✓
Loyan	✓	X	✓	✓	✓	✓	X	✓	X	X	X	X	X	X	X	✓
Bohala	✓	X	✓	✓	✓	X	X	X	X	X	X	X	X	X	X	✓
Johari	✓	✓	✓	✓	✓	✓	X	✓	✓	X	X	✓	X	✓	✓	✓
Gorana*	✓	X	✓	✓	✓	X	X	✓	X	X	X	X	X	X	X	✓
Latifpur Sabakheri*																
Asafpur Kharkhari	✓	X	✓	✓	✓	X	X	X	X	X	X	X	X	X	X	✓
Kherki	✓	X	✓	✓	✓	X	X	X	X	✓	X	X	X	X	X	✓
Wazidpur	✓	X	✓	✓	✓	X	X	X	✓	X	X	X	X	X	X	✓
Teodi	✓	X	✓	✓	✓	✓	X	X	✓	X	X	X	X	X	X	✓
Sadullapur	✓	X	✓	✓	✓	X	X	X	X	X	X	X	X	X	X	✓
Angadpur	✓	X	✓	✓	✓	✓	X	X	X	X	X	X	X	X	X	✓

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team of Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut" Sponsored by DRDA- Baghpat-June July2004

3. METHODOLOGY

First of all the secondary data was collected from records of Census of India and maps were prepared. Extensive field survey was conducted by the expert research team of the Giri Institute of Development Studies, Lucknow from village to village and Gram Pradhans were contacted to tally their official records. BDOs and their officials of Baraut and Baghpat blocks were involved along with the Institute's expert research team to collect the data and ascertain the validity of data. On the basis of Census and field survey the required tables were prepared for analysis purposes.

4. POPULATION DYNAMICS

The maximum population is 7278 (2001) in Malakhpur village and lowest in Latifpur Sabakheri village 548. The large size of population in villages depends upon nearness to Baraut town and road accessibility to town. The growth of population during thirty years 1971-2001 is maximum in all the villages, which fall in Baghpat block are Kherki, Tyodhi and Sadullapur, where population has multiplied from five to almost nine times. These villages are located on Baghpat - Saharanpur Highway, which also connects Baraut. The villages Asafpur Kharkhari and Latifpur Sabakheri are just adjacent to the Western boundaries of Baraut town which have also doubled their population. Most of the villages grew only about 50.0 per cent during thirty years.

Table 2 : **Population Structure, 2004**

S. No.	Name of Village	Area (Hectare)	Total population	Size of Household	Population Density (per Hectare)	Sex Ratio	Caste wise Percentage of Population		
							Forward	Backward	Scheduled caste
1	Malakpur	813	7278	6.56	8.95	804	7.61	77.80	14.59
2	Shahpur Badauli	562	6659	6.88	11.85	769	91.85	0.00	8.15
3	Baraka	344	4167	6.46	12.11	865	58.27	22.08	19.65
4	Dhikana	482	4744	6.65	9.84	819	7.38	81.68	10.94
5	Lohadda	215	3497	6.88	16.27	937	5.35	82.10	12.55
6	Loyan	658	4640	6.70	7.05	794	2.72	84.05	13.23
7	Bohala	200	800	7.06	4.00	702	68.75	21.13	10.13
8	Johari	430	5313	6.18	12.36	790	33.30	44.33	22.38
9	Gorana*	418	4507	6.89	10.78	818	24.85	68.09	7.06
10	Latifpur Sabakheri*	88	548	6.60	6.23	857	25.00	60.95	14.05
11	Asafpur Kharkari	256	1698	7.17	6.63	927	14.13	81.74	4.12
12	Kherki	280	2100	6.58	7.50	887	90.95	7.14	1.90
13	Wazidpur	550	6200	7.04	11.27	923	23.50	68.00	8.50
14	Teodi	350	3200	6.34	9.14	923	76.56	14.06	9.38
15	Sadullapur	250	1500	7.62	6.00	923	62.93	27.80	9.27
16	Angadpur	300	2125	6.97	7.08	923	17.32	80.89	1.79

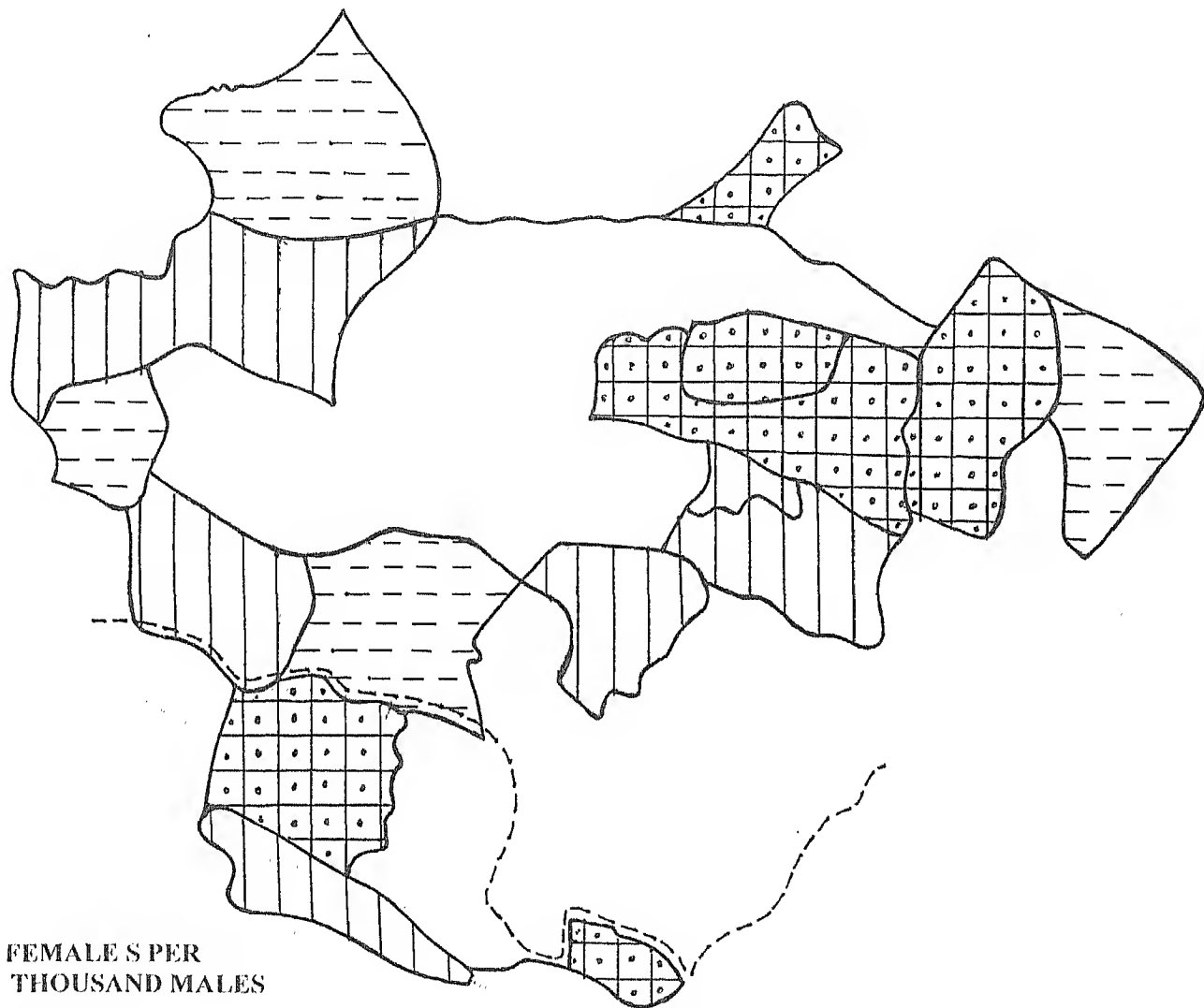
* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team of Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut" Sponsored by DRDA- Baghpat-June July 2004

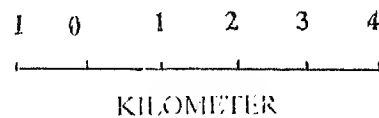
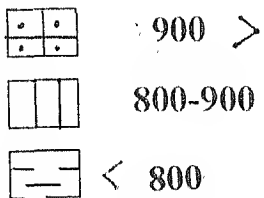
Fig. 6

CLUSTER OF VILLAGES OF BARAUT FOR PURA

SEX RATIO



FEMALE S PER
THOUSAND MALES



SOURCE: BASED ON CENSUS MAP

Another interesting phenomenon took place in most of the villages that during 1971-2001 the growth rate of female population remained almost half of their counter part males, except in Asafpur and Latifpur villages, where female growth was recorded more than males. Another astonishing picture emerges that in all the three villages of Baghpat block the females have reduced from 20 to nearly 40 per cent, which is extremely worrisome, when males have increased upto several folds.

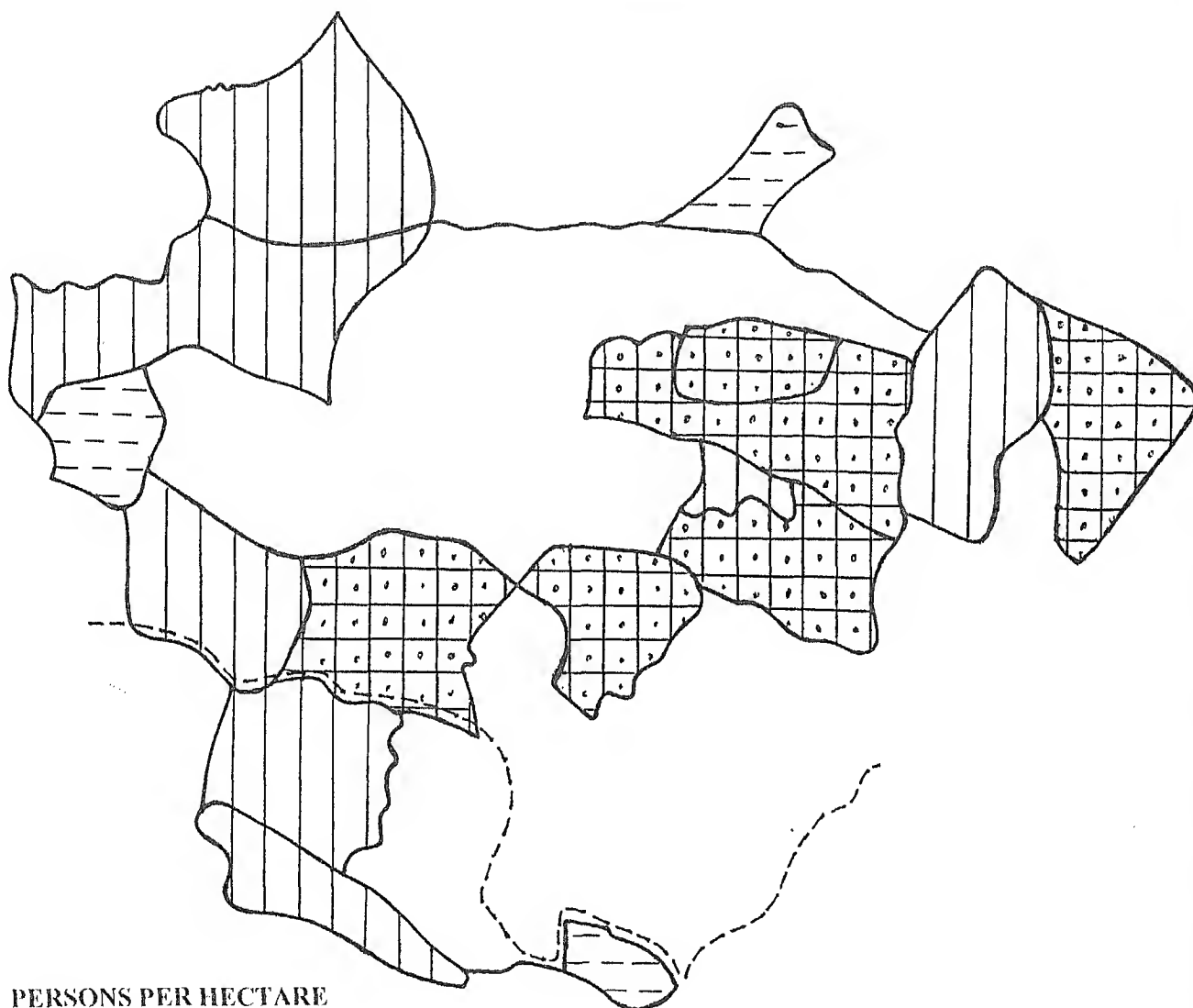
The sex ratio, i.e., females per 1000 males is varying from village to village. The lowest sex ratio is 702 in Bohala followed by 769 in Shahpur Badauli, 790 in Johari and 794 in Loyan, which is worrisome and according to a Pradhan, sometimes brides are purchased from far off states to marry.

The maximum proportion of Scheduled Caste population is 22.4, 19.7 and 14.6 per cent in Johari, Baraka and Malakpur villages respectively, whereas in half of the villages the Scheduled Castes population is less than 10.0 per cent. In almost half of the villages the Backward population range between 68.1 to 84.1 per cent, which is highest. The Backward population is absent in Shahpur Badauli village and only 7.1 per cent is in Kherki village.

Fig.7

CLUSTER OF VILLAGES OF BARAUT FOR PURA

DENSITY OF POPULATION



PERSONS PER HECTARE



> 12



6-12



< 6

1 0 1 2 3 4



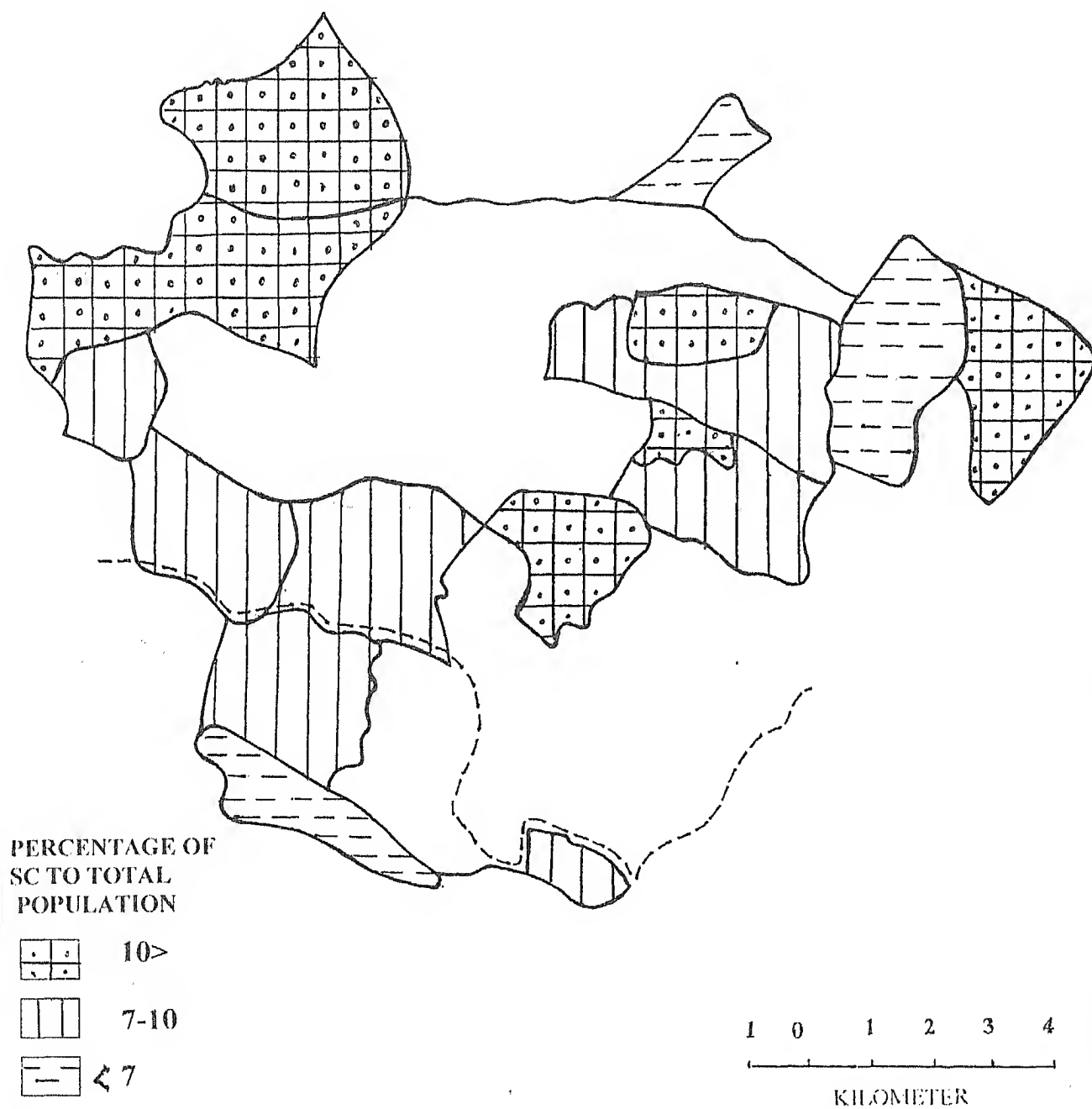
KILOMETER

SOURCE: BASED ON CENSUS MAP

Fig.8

CLUSTER OF VILLAGES OF BARAUT FOR PURA

PROPORTION OF SC POPULATION

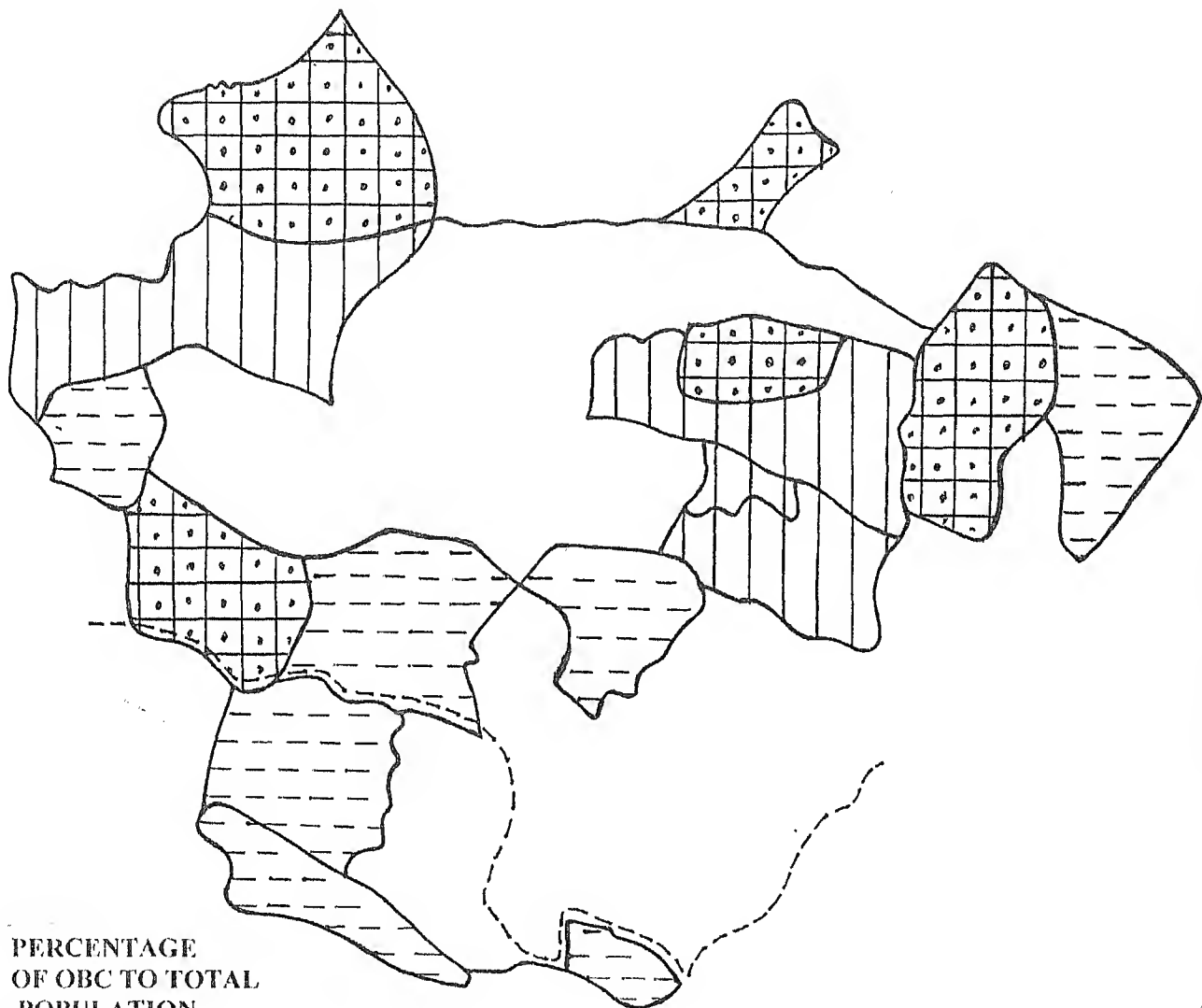


SOURCE: BASED ON CENSUS MAP

Fig.9

CLUSTER OF VILLAGES OF BARAUT FOR PURA

PROPORTION OF OBC POPULATION



PERCENTAGE
OF OBC TO TOTAL
POPULATION



80>



50-80



<50

1 0 1 2 3 4



KILOMETER

SOURCE: BASED ON CENSUS MAP

Area-wise Malakpur village is largest with 813 hectares and smallest village is Latifpur Sabakheri village with only 88 hectares. Like-wise (according to 2001 census) maximum population is inhabited in Malakpur village with 7278 people and lowest in Latifpur Sabakheri village with 548 people. The density of population is highest in Lohadda village, i.e. 16.3 persons per hectare. Other higher density villages are Johri, Baraka, Shahpur Badauli, Bazidpur and Gorana where density ranges between 12.4 to 10.8 persons per hectare respectively. In rest of the villages density is less than 10 persons per hectare and among them least is in Bohala with only 4 persons per hectare.

The rural population migrates to urban areas due to lack of better employment and employment avenues. The employment avenues are almost negligible in villages, because of lack of basic infrastructure like uninterrupted power supply, road transport facilities, health and sanitation, banking facilities, educational institutions, post offices and telecommunication facilities and marketing, etc.

Provision of Urban Amenities in Rural Areas (PURA) can be implemented in the following order in light of already existing schemes:

Sl.No.	PURA PLAN	Existing Schemes
1.	Land and housing loan: Land Use planning: Reserving places for parks, burial grounds, playgrounds, religious places, community centres, bazaar/markets, library, staff quarters, NGOs, protection of reserve forests	C.C.Y., I.A.Y.
2.	Roads, drains, bridges and public transport	
3.	Environment protection, sanitation, waste disposal, potable water supply	R.G.D.W.P., R.C.P.
4.	Health Centres, doctor on move. pharmacists, Local awareness training for good health	
5.	Veterinary Centres	
6.	Electricity: Street Light and easy electric/power connection in residential and work areas	
7.	PCO and IT Kiosks in cluster areas	
8.	Education: Primary, Middle, High School and Intermediate, Popularization of NEOS and employment oriented education like Dairy, poultry and other agro-based, etc.	
9.	Identification of resources: Agricultural innovations, industry, horticulture, etc. Environmentally sustainable development with the emphasis on non-agricultural activities.	S.G.S.R.Y., S.G.R.Y., S.C.P.(for SC)
10.	Entertainment: Encouragement and training in wrestling, boxing and other physical activities	
11.	Social Security: Police and Community Guards	W.O.H.P.Y., W.D.M.P.
12.	Maintenance: Besides Government arrangements, Community Volunteers.	

5. DEPENDABLE POWER SUPPLY

Table 3 shows that in seven villages, i.e. Bazidpur, Shahpur Badauli, Asafpur Kharkhari, Dhikana, Malakpur, Teodi and Angadpur, about 60 to 70 per cent houses are having electric connections which is highest. In Loyan village only 20 per cent houses are connected with electricity which is least. Though uninterrupted power supply depends on Central and State Government policy and management, but district authorities can see that

the electric poles and wires reach the doorsteps of the residents. Streetlights are an important factor of development, which can be looked after by the electricity department on regular inspection and maintenance basis.

TABLE 3: ELECTRICITY INFRASTRUCTURE: EXISTING AND PROPOSED

S. No.	Name Of Village	Existing Electric Infrastructure		Infrastructure Proposed			Amount Required in Rs.
		Sub Station	L.T. Line	No. Of Poles	Length of Wires(M)	Sub Station	
1	Malakpur		1.5	8	300	1	526,500
2	Shahpur Badauli		2	87	1305		219,675
3	Baraka		6	3	600		27,000
4	Dhikana		1.5	30	2000		136,000
5	Lohadda		1	20	1000		75,000
6	Loyan		2	100	4500	1	857,500
7	Bohala		1.5	10	1000		55,000
8	Johari		8	10	350		32,250
9	Gorana*		3	20	4200		187,000
10	Latifpur Sabakheri*						
11	Asafpur Kharkari		4	25	2000	1	620,000
12	Kherki		2	11	330		33,550
13	Wazidpur		2.5	50	400		114,000
14	Teodi		1.5	30	2000		130,000
15	Sadullapur		0.8	15	1200		72,000
16	Angadpur		0.8	30	2000		130,000
				Total			3,215,475

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team of Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut" Sponsored by DRDA- Baghpat-June July 2004

The estimate has been worked out that about 449 electric poles are required and about 23185 metre length electric wire is required to reach the electricity at the door steps of the residents who are deprived of electric connection. Another important infrastructure is of sub-station, which is estimated that at present 3 sub-stations would serve the purpose. About Rs.3,215,475/- are required for complete electrification works.

6. POTABLE WATER SUPPLY

In all the cluster villages there is no public water supply system. Households are either using their own hand pumps, which are within the residential premises or they fetch water from the roadside public handpumps Mark-II. In most of the cases the ground water is generally polluted due to mixture of sugar mill's waste water, which is untreated. There is a popular demand that households should be provided the treated water by public water supply system. As table shows that majority of the households do not have their own hand pumps and they have to go out to fetch the water.

It is estimated that for 10,000 population a Tubewell is required which costs Rs.12,00,000 and in all 5 tubewells would serve the purpose, which would cost Rs.60,00,000/-. Overall cost of tubewells and pipelines together would roughly go to Rs.10,00,000/-.

TABLE 4: POTABLE WATER: EXISTING AND PROPOSED

S. No.	Name of Village	Existing			Tubewells Proposed	Amount Required in Rs.
		Houses with hand pump	% Houses without water source	Village Hand Pump Mark-II		
1	MAHARAJPUR	520	60.00	49		
2	SHAHPUR BADAULI	400	56.14	46	1	2,000,000
3	BARAKA	276	56.14	28		
4	DHIKANA	300	66.37	40	1	2,000,000
5	LOHADDA	630	30.00	28		
6	LOYAN	646	0.00	40	1	2,000,000
7	BOHALA	105	34.37	16		
8	JOHARI	400	48.72	45	1	2,000,000
9	GORANA*	485	20.49	34		
10	LATIFPUR SABAKHERI*					
11	ASAFPUR KHARKARI	90	75.00	16		
12	KHERKI	236	4.10	21		
13	WAZIDPUR	667	44.42	48	1	2,000,000
14	TEODI	467	27.03	24		
15	SADULLAPUR	167	47.81	14		
16	ANGADPUR	375	29.91	17		
					TOTAL	10,000,000

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team of Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut" Sponsored by DRDA- Baghpat-June July 2004

Fig.10: A SCENE OF LOYAN VILLAGE



A Lady is Fetching Water

7. ROAD TRANSPORT

Road transport is an important amenity in modern time without it one cannot imagine any development. Though roads are passing through all the villages, but there are many houses (total about 1000 houses) without any pucca road connectivity. It is estimated that 16,335 roads are required to be constructed for complete road connectivity, which would roughly cost Rs.1.96 crore. All the major roads pass through Baraut towns and neighbouring cluster villages. Heavy vehicles create enormous congestion, traffic jams, and pollution. Therefore, it is quite essential that the ring road should be constructed to allow the heavy vehicles to pass without disturbing the Baraut towns and cluster villages of PURA. Ring road would be roughly about 45 km. and would roughly cost Rs.6 crore. There are roads and bridges, which require repair work, which is estimated to be costing about Rs.10,00,000. Altogether Rs.80,602,000 is estimated for roads.

Only Malakpur, Shahpur Badauli and Johari villages have either bus stands or tempo stands, otherwise most of the villages are without any local transport system. It is proposed that local unemployed youths are to be motivated to operate their tempo or mini-buses and they may be provided easy loans for this purpose. In absence of public transport most of the villagers use JUGAD (locally assembled vehicle, the cart is energised by tube-well/generator engine), which is unauthorized and highly risky and uncomfortable. It may be acceptable to use for agricultural or construction purposes.

TABLE 5: ROAD TRANSPORT: EXISTING AND PROPOSED

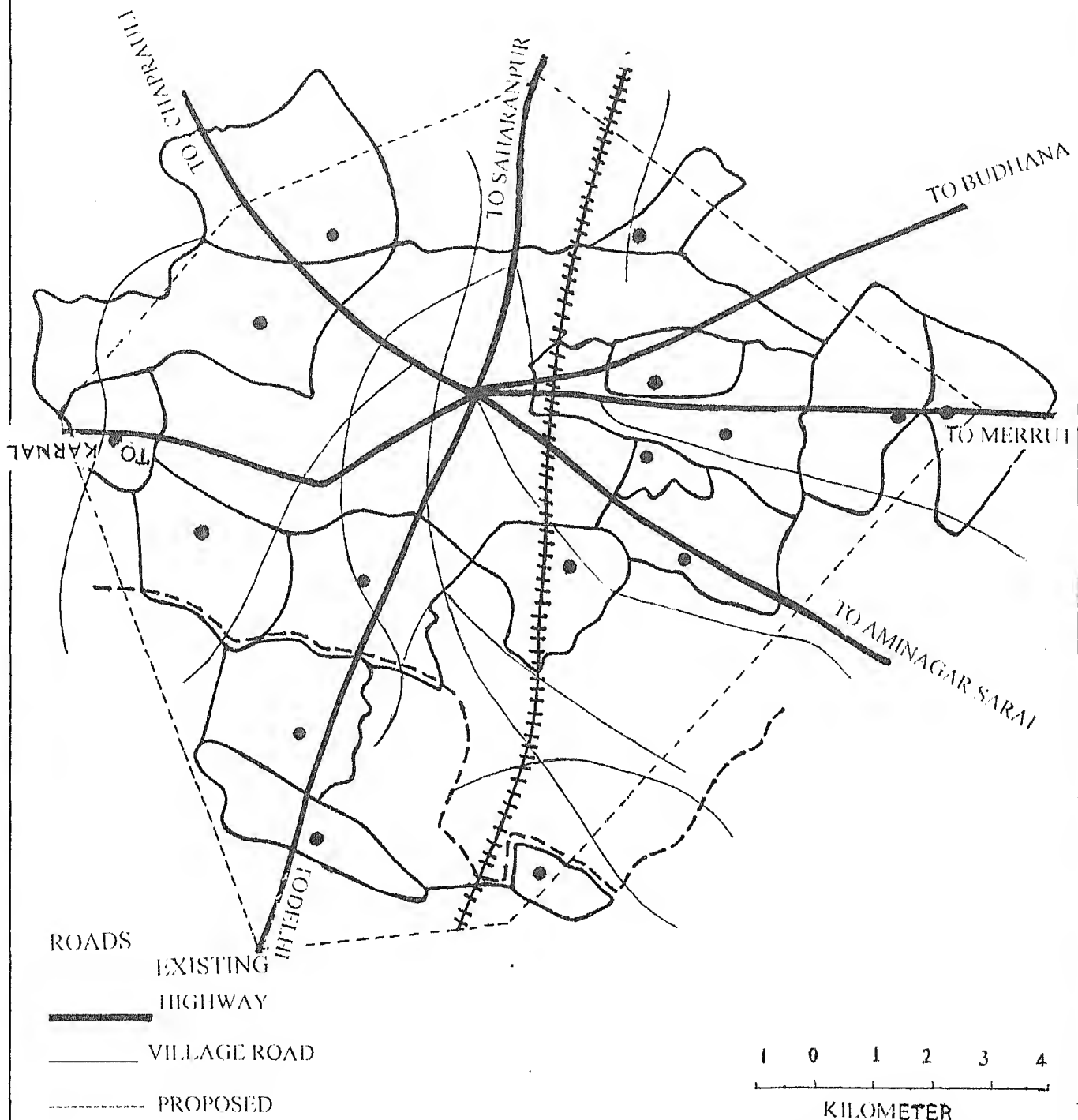
S. No.	Name of Village	Pucca road		Roads and bridges to be repaired		Amount Required in Rs.
		No. of Houses without	Required in M	Length Road (M)	No. of Bridges	
1	MALAKPUR	65	3000	3600	1	3,600,000
2	SHAHPUR BADAULI	57	1000		1	1,200,000
3	BARAKA	22	275	400		330,000
4	DHIKANA	100	700			840,000
5	LOHADDA	20	110			132,000
6	LOYAN	0	0	1000		0
7	BOHALA	20	250			300,000
8	JOHARI	50	500	250		600,000
9	GORANA*	180	1500		1	1,800,000
10	LATIFPUR SABAKHERI*					
11	ASAFPUR KHARKARI	80	1000	1500		1,200,000
12	KHERKI	30	300			360,000
13	WAZIDPUR	200	2500			3,000,000
14	TEODI	150	5000			6,000,000
15	SADULLAPUR	0	0			0
16	ANGADPUR	25	200			240,000
		Total				19,602,000
		Repair Cost				1,000,000
		Cost of Ring Road				60,000,000
		Grand Total				80,602,000

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team of Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut" Sponsored by DRDA- Baghpat-June July 2004

Fig.11

CLUSTER OF VILLAGES OF BARAUT FOR PURA EXISTING AND PROPOSED ROAD LINKS



SOURCE: BASED ON CENSUS MAP

8. TELEPHONE, MOBILE, PCO, INTERNET AND IT SERVICES

Today telephone, mobile, internet and information-technology is most important factor of development, as the life has become fast, interdependence has increased and the world has shrank. The clusters of villages are well connected by telephone line, but there are only few villages where 10.0 per cent or more houses are having telephone connections. For example in Shahpur Badauli 38.3, Gorana 32.8, Malakpur 23.0, Bohala 18.8 and Kherki 10.0 per cent houses are connected by telephone which is maximum and rest of the villages have less than 10 per cent telephone connections. Also there are only few villages where more than 10 mobiles per 1000 population are found are Malakpur 27.5, Lohadda 22.9, Gorana 13.3 and Bohala 12.5 and rest of the villages have less than 10 mobiles per 1000 population. Except Bohala village, in rest all the villages the PCOs are there but their numbers are quite insufficient and sometimes they are out of order, therefore, people have to go to Baraut town which is inconvenient. There is no internet or IT services in villages and people have to depend on Baraut town. Local unemployed youths have to be financially helped to open their PCOs, Internets and other IT services for overall development.

**TABLE 6: TELEPHONE, MOBILE, PCO, INTERNET AND IT SERVICES:
EXISTING AND PROPOSED**

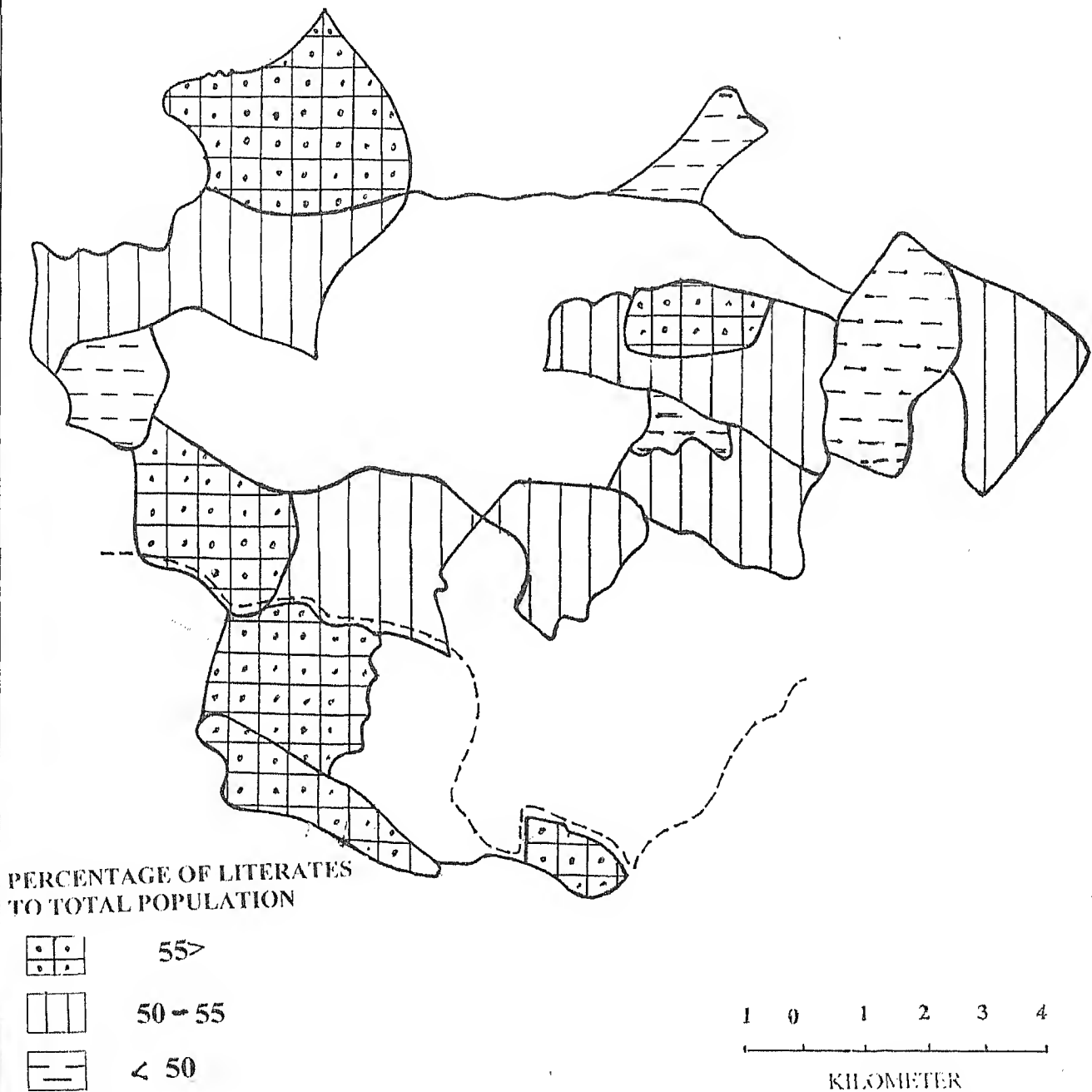
S. No.	Name of Village	% Houses connected with telephone	No. of mobiles/ 1000 population	No. of P.C.O.	Internet/ IT Services in Village Yes/No	Amount Required for PCO, internet, I.T. in Rs.
1	Malakpur	23.08	27.48	6	No	Through Government employment schemes loans to unemployed Total amount Rs. 2,000,000
2	Shahpur Badauli	38.38	8.26	2	No	
3	Baraka	4.32	8.40	2	No	
4	Dhikana	2.80	3.16	2	No	
5	Lohadda	5.56	22.88	1	No	
6	Loyan	6.19	2.59	3	No	
7	Bohala	18.75	12.50		No	
8	Johari	6.41	5.65	3	No	
9	Gorana*	32.79	13.31	2	No	
10	Latifpur Sabakheri*					
11	Asafpur Kharkari	4.17	5.89		No	
12	Kherki	10.00	4.76	1	No	
13	Wazidpur	8.33	8.06	3	No	
14	Teodi	9.38	9.38	4	No	
15	Sadullapur	7.81	4.67	1	No	
16	Angadpur	6.54	4.24	1	No	

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team of Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut" Sponsored by DRDA- Baghpat-June July 2004

Fig.12

CLUSTER OF VILLAGES OF BARAUT FOR PURA LITERACY



SOURCE: BASED ON CENSUS MAP

9. EDUCATION

Education or enlightenment is the mother of all development, without which we can't compete today when the globalisation culture is fast entering in our day-to-day activities. Roughly about half of the adult population is literate in almost all the villages, except in Latifpur Sabakheri, where only less than one-third population is literate, which is a disturbing picture. Female literacy is far behind than the male literacy, which suggests that besides overall efforts are needed but specially for females special care are required for better education. Our traditional society does not prefer the females to be educated in co-education schools, therefore, girls' schools are to be opened for enhancing education among females.

In overall population about one-fifth population belongs to children of primary and middle levels, but the data shows that hardly half of them go to school. In villages besides government primary and middle schools, there are private schools also, but they are costly and poor children can't afford. There is no school in village which is upto High School or Intermediate, due to which children are compelled to go to schools which are quite far. There is no primary or middle school exclusively for girls in any village.

TABLE 7: EDUCATION: EXISTING AND PROPOSED

S. No.	Name Of Village	Percentage Literacy (2001)			EXISTING											PROPOSED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
					No. of Primary School			Percentage of School Area		No. of Students			No. of Teachers		No. of Middle School		Percentage of School Area		No. of Students			No. of Teachers		Primary School	Middle School	High School	Inter mediate	Amount required for construction in Rs.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male	Female	% Built Area	% Open Area	Total	Male

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

** Under construction

Sources: Based on survey conducted by the author and his team Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut"
Sponsored by DRDA- Baghat-June July 2004

Fig.13: MIDDLE SCHOOL OF MALAKPUR VILLAGE



India Mark-II Hand Pump provides Untreated Water to Children

All the PURA villages have primary schools. Shahpur Badauli, Lohadda and Gorana have three primary schools each. Except Asafpur Kharkhari, Kherki, Bazidpur and Saidullapur all the villages have middle school, but none have more than one. In Shahpur Badauli middle school is under construction, where no student is admitted as yet.

In comparison to male enrolment in primary schools the female students are hardly one-third to maximum half, which is serious. In middle schools the overall enrolment is not significant, but female enrolment in many schools is higher than male students. In Sadullapur the teacher - students ratio in primary school is 5 : 100, which is maximum, whereas in Johari and Gorana it is lowest, i.e. 1.87 : 100 and 1.71 : 100 respectively. The teacher - students ratio in middle schools is highest in Dhikana 5.71 : 100, followed by Angadpur 5.45 : 100, Teodi 5 : 100, Malakpur 5 : 100 and Johri 4.14 : 100. It has been observed that there is even scarcity of primary schools in villages, as the children have to go out of villages for even primary school education. Among out-going children from villages for primary and onward education, the majority belongs to male children, as female children are not allowed due to safety point of view.

Now it is high time that the number of primary and middle schools should be increased in the villages as in most of the cases they are not able to accommodate more children. Also High School and Intermediate

colleges are to be located at accessible distances, so that children of other villages may also be benefitted. It is estimated that if the land is provided by the villagers, then about 3 crores of rupees may be required to construct the schools as proposed in the following table. As the detailed information is given in the table, if sufficient area is available with the existing primary schools, then they can be enhanced upto Middle Schools. For High Schools and Intermediate colleges new areas are to be found out as their requirements differ. Among these proposed schools, some may be identified for only girl students.

10. HEALTH AND SANITATION

Health and sanitation are the fundamentals for healthy living. Healthy environment is first and foremost for healthy living. It is found that Malakpur and Shahpur Badauli villages are always under flood condition may be either by bad drainage system or rain water. Other villages are partly affected. Therefore, proper drainage system by pucca drain is an important requirement to save people from various diseases. Health Centres are supposed to be located at accessible locations, so that villagers may be benefitted. There are only two primary health centres, which are located in Lohadda village, where two doctors are posted. In other villages there is no such facility and people have to visit Baraut town even in emergency. Except Kherki in all the villages one Assistant Nurse

TABLE 8: HEALTH AND SANITATION: EXISTING AND PROPOSED

S. NO	Name of Village	% Houses Flooded		Drain in Metre		Existing						Proposed			Amount Required for Construction in Rs.	
		By Drain	By Rain	Kutcha Existing	New Pucca Required	Primary Health centers	No. of Drs.	No. of Nurses	No. of Veterinary hospitals	No. of Drs.	Other Vet. Staff	Primary Health Centre	Hospital	Veterinary hospitals	For Pucca Drainage	For PHC and Hospital
1	Malakpur	100.00	100.00	1500	2000			1(ANM)	0		3	1			700000	1000000
2	Sihapur Badauli	100.00	100.00	350	350			1(ANM)	1	1		1			140000	1000000
3	Baraka	11.36	11.36	120	750			1(ANM)	0			1			174000	1000000
4	Dhikana	30.00	30.00	0	1200			1(ANM)	0			1			240000	1000000
5	Lohadda	0.00	2.25	0	3000	2	2	1(ANM)	0		1	0			600000	
6	Loyan	0.00	23.21	0	1500			1(ANM)	1	1		1			300000	1000000
7	Bohala	21.87	0.00	0	0			1(ANM)	0		1	1	1	1	0	12000000
8	Johari	0.00	9.00	0	150			1(ANM)	1		1	1			30000	1000000
9	Gorana*	0.00	50.00	0	0			1(ANM)	1			1				1000000
10	Latifpur Sabakheri*															
11	Asafpur Kharkari	15.00	25.00	1000	0			1(ANM)	0			1		1	200000	2000000
12	Kherki	6.25	0.00	2000	0				0			1		1	400000	2000000
13	Wazidpur	0.00	16.67	0	5000			1(ANM)	0			1	1		1000000	11000000
14	Teodi	0.00	23.44	0	0			1(ANM)	0			1	1			11000000
15	Sadullapur	0.00	12.50	0	0			1(ANM)	0			1				1000000
16	Angadpur	0.00	4.67	0	0			1(ANM)	0			1				1000000
												Total			3784000	47000000
												Grand Total				50784000

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut"

Sponsored by DRDA- Baghpat-June July 2004

Midwife is posted. It is proposed that in all the villages there should be one primary health centre and at least overall three hospitals with beds should be provided at convenient distance.

Since villagers are partly milkmen and dairying is an important activity, the Veterinary hospitals play an important role. There is one veterinary hospital in each, Shahpur Badauli, Lohan Johri and Gorana villages, which are insufficient, therefore three more Veterinary hospitals are proposed at convenient villages, so that neighbouring villagers may also be benefitted. For all these purposes roughly about 5 crore would be required only to create the infrastructure.

11. MARKET AND ALLIED FACILITIES

For farmers better market facilities are essential to get the reasonable prices for their farm produces. Also the farm commodities like fertilizers, insecticides, seeds and implements are an important essentials which should be easily available for better agriculture and income. Besides these shops for daily use goods are required at easily accessible locations. Banks and Post Offices are also allied necessities which also help farmers indirectly. There are few shops of fertilizers, seeds and implements in few villages, but most of the villagers have to depend on other village. There are seven villages in PURA cluster, where one Post Office exists in each village. At least four more Post Offices are required, one each in four

TABLE 9: MARKET AND ALLIED AMENITIES: EXISTING AND PROPOSED

S. No	Name of Village	Existing						Proposed			Amount required for construction of weekly markets In Rs.
		No. of Post Office	No. of Banks	No. of Shops				Post Office	Bank	Weekly Market	
				Fertilizers	Seeds	Implements	General Grocery				
1	Malakpur	1		1			6		1	1	5,000,000
2	Shahpur Badauli	1		2		10	11		1	1	5,000,000
3	Baraka	1		1			12				
4	Dhilkana	1					10				
5	Lohadda			1	1	4	20				
6	Loyan						4	1			
7	Bohala						5				
8	Johari	1		2	1	15	15		1		
9	Gorana*						7	1	1		
10	Latifpur Sabakheri*										
11	Asafpur Kharkari						5	1			
12	Kherki		1				8	1			
13	Wazidpur	1					10			1	5,000,000
14	Teodl	1					12				
15	Sadullapur						10				
16	Angadpur						8				
								Total			15,000,000

* Latifpur Sabakheri is merged with Gorana at the time of Survey and now it is called GORANA SABAKHERI

Source: Based on survey conducted by the author and his team of Giri Institute of Development Studies, Lucknow, for the project "PURA -Baraut" Sponsored by DRDA- Baghpat-June July 2004

villages to cover all the villages. Similarly there is only one Bank in Kherki which is insufficient, therefore, at least four Banks are proposed, one each in four villages at convenient distance. There is no weekly market or Bazaar, farmers carry their products to either Baraut town or to Delhi, which is costly and time taking. Therefore, three agriculture markets, are proposed to be located at convenient distance, so that the farmers would be maximum benefitted from their hard produced commodities. These markets would also serve for shopping the fertilizers, seeds and implements and other goods. It would also be a weekly animal market. Total 1.5 crore of rupees would be required for weekly markets for construction of shades and offices, etc.

TABLE 10: TOTAL EXPECTED EXPENDITURE UNDER PURA -BARAUT

Sl.No.	Items	Rupees
1.	Power	3,215,475
2.	Potable Water	10,000,000
3.	Repair, New Roads, Ring Road	80,602,000
4.	Telecommunication (by Loans)	2,000,000
5.	Education	29,500,000
6.	Health and Sanitation	50,784,000
7.	Market/Bazaar	15,000,000
8.	Stadium: Mainly for Wrestling and other games in Shahpur Badauli	5,000,000
	GRAND TOTAL	196,101,475